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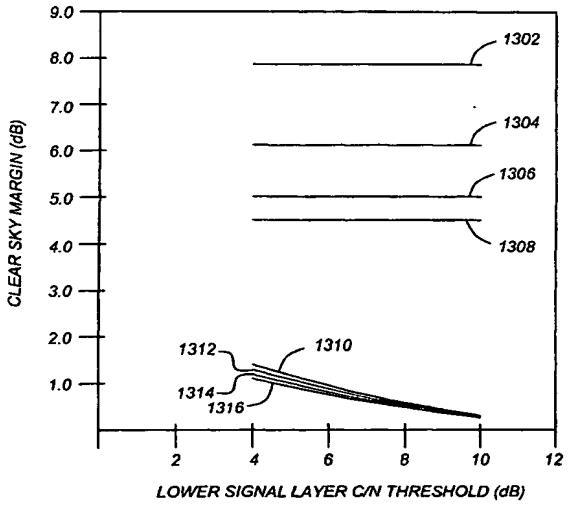
(54) Title: METHOD AND APPARATUS FOR TAILORING CARRIER POWER REQUIREMENTS ACCORDING TO AVAILABILITY IN LAYERED MODULATION SYSTEMS



(57) Abstract: A method and apparatus transmitting a layered modulation signal having a first signal layer having first signal symbols and a second signal layer having second signal symbols is disclosed. The method comprises the steps of determining a first signal layer modulation carrier power C_L at least in part according to a first signal layer clear sky margin M_L and a first signal layer availability, determining an second signal layer modulation carrier power C_U at least in part according to an second signal layer clear sky margin M_U and an second signal layer availability, modulating the first signal symbols according to a first carrier at the determined first signal layer modulation carrier power; modulating the second signal symbols according to a second carrier at the determined second signal layer modulation carrier power, and transmitting the two layers independently.

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